

CLAIMS

I claim:

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1. A vehicle control system for controlling a performance characteristic of the vehicle; comprising
- a controller coupled to the vehicle control system, the controller adapted to receive a vehicle position signal, the controller employing the position signal to determine at least one characteristic pertinent to the operation of the vehicle control system and outputting a control signal;
- wherein the vehicle control system receives the control signal and tailors its performance in response thereto.
2. The vehicle control system of Claim 1, wherein the vehicle control system includes an anti-lock brake system and said characteristic includes wheel skidding.
3. The vehicle control system of Claim 1, wherein the vehicle control system includes a traction control system and said characteristic includes wheel torque.
4. The vehicle control system of Claim 1, wherein the vehicle control system includes a stability system and said characteristic includes a rate at which the vehicle is being steered.

5. The vehicle of Claim 1, wherein the control signal includes a road surface type.

6. The vehicle control system of Claim 1, wherein the control signal includes a road surface condition.

7. The vehicle control system of Claim 1, wherein the control signal includes a vehicle speed signal.

8. The vehicle control system of Claim 1, wherein the controller is operable in a default mode wherein the controller outputs a predetermined default control signal.

9. The vehicle control system of Claim 1, wherein the controller is operable in a default mode wherein the controller does not output a control signal and permits the vehicle control system to operate in an iterative manner.

10. The vehicle control system of Claim 1, wherein said vehicle position signal is received from one or more global positioning satellites.

11. A vehicle control system of Claim 1, wherein said controller further adapted to receive a weather signal, and wherein said weather signal affects said determination of said characteristic

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12. A vehicle control system for controlling a vehicle comprising:
an anti-lock brake system for controlling a brake force exerted by a
brake caliper to limit vehicle skidding in a predetermined manner;
a traction control system for controlling acceleration of the vehicle to
limit wheel slip in a predetermined manner;
a stability system for controlling a yaw rate of the vehicle in a
predetermined manner; and
a controller coupled to the anti-lock brake system, the traction control
system and the stability system, the controller adapted to receive a vehicle
position signal and produce a control signal in response thereto, the control
signal including a road surface type;
wherein the anti-lock brake system, the traction control system and the
stability system receive the control signal and tailor their performance in
response thereto.

13. The vehicle control system of Claim 12, wherein the control
signal further includes a road surface condition.

14. The vehicle control system of Claim 12, wherein said vehicle
position signal is received from one or more global positioning satellites.

15. The vehicle control system of Claim 12, wherein said controller
further adapted to receive a weather signal, and wherein said weather signal
affects said determination of said characteristic.

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16. A method for controlling a vehicle having a vehicle control system, the method comprising the steps of:

providing a controller for receiving a vehicle position signal;

determining at least one characteristic pertinent to the operation of the vehicle control system from the position signal;

generating a control signal based on the at least one characteristic pertinent to the operation of the vehicle control system; and

enhancing the performance of the vehicle control system based on the control signal.

17. The method of Claim 16, wherein the step of determining at least one characteristic pertinent to the operation of the vehicle control system includes the step of determining a road surface type.

18. The method of Claim 16, wherein the step of determining at least one characteristic pertinent to the operation of the vehicle control system includes the step of determining a road surface condition.

19. The method of Claim 16, wherein the step of determining the at least one characteristic pertinent to the operation of the vehicle control system includes the step of determining an actual speed of the vehicle.

20. The method of Claim 16, wherein the step of generating the control signal includes the steps of:

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determining if a predetermined condition exists;
generating the control signal if the predetermined condition does not
exist; and
otherwise, operating in a default mode.

21. The method of Claim 16, wherein the predetermined condition includes the absence of said vehicle position signal.

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